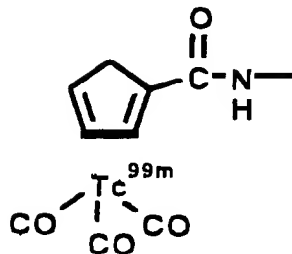
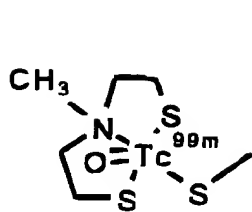
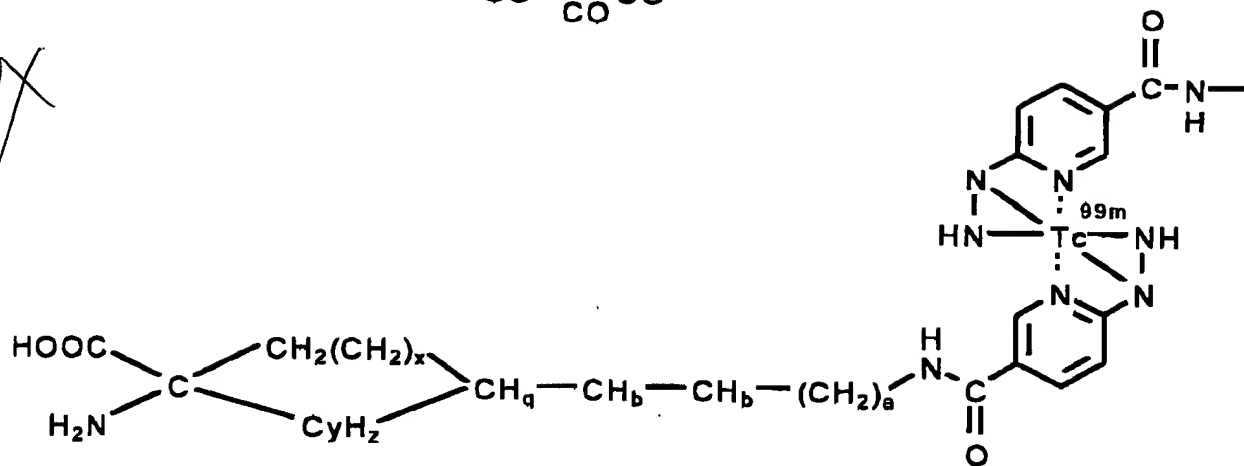


C2
continue

or

TOSOOX



REMARKS

The Examiner is thanked for the courtesy of a telephone interview and for affording applicants the opportunity to clarify certain matters.

1. Claims 36 and 41 recite a structure for element "Z" which includes an R_q which was left undefined after the previous amendment. The intended structure is of the type shown as compound 189 (p.70) or 195 (p.71). These compounds have a bifunctional Tc^{99m} -labeled moiety to each of which a cyclic amino acid of the invention is covalently bound. The amended claims present the intended structure for "Z" unambiguously.

2. Per the Examiner's inquiry, applicants' attorney has confirmed with inventor Goodman that the structure shown as "Z" in claim 32 is an art-recognized way of writing the intended structure. The complex containing a Tc^{99m} atom is bound in a coordination complex

80

analogous to a ferrocene, except that the tricarbonyl forms one side of the pi-electron "sandwich" while the cyclopentadiene structure provides the other. Specific bond lines to the cyclopentadiene are not drawn since the Tc^{99m} is not covalently bonded thereto. The structure of such compounds has been published by Wenzel et al (reference to be provided).

3. A copy of the claims allowed in the parent application, USSN 08/554,906 is supplied herewith. The Examiner may review the claims to determine whether an issue of double-patenting exists.

It is believed that no fee is required with this submission. If this is incorrect, please charge any deficiency to Deposit Account No. 07-1969.

Respectfully submitted,



Lorance L. Greenlee
Reg. No. 27,894

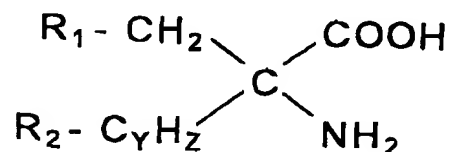
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Attorney Docket No. 64-95A
bmk: June 3, 1998

64-95 Claims

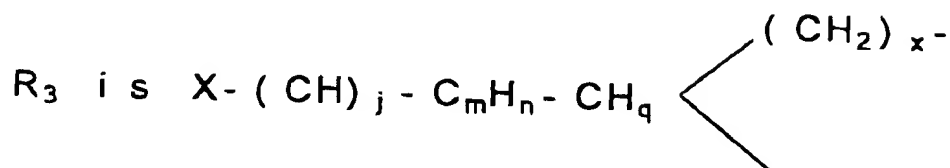
As amended March 5, 1997; September 18, 1997; and March 12, 1998 and allowed.

1. An amino acid analog having the general structure

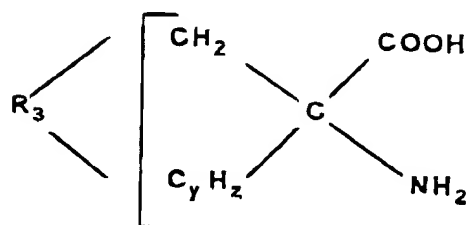


where R_1 is X , $X-CH=CH-$, or R_3

R_2 is H , or R_3 if R_1 is R_3 ,



such that



is formed

where x is 0 or 1,

y is 1 or 2,

z is 1, 2, 3 or 4 and $z > y$ if y is 2,

q is 1 or 0 if n is 1 and j is 0,

n is 1 or 2, but 0 if m is 0,

m is 0 or 1,

j is 0 or 1, and

X is ^{18}F , ^{123}I , ^{125}I , ^{131}I , ^{75}Br , ^{76}Br , ^{77}Br , or ^{82}Br .

2. A compound of claim 1, wherein R_1 and $R_2 = R_3$.

3. A cyclic compound according to claim 1 wherein

x is 0
y is 1
z is 2
q is 1
m is 0, and
j is 0

4. A compound according to claim 3 wherein X is ^{18}F , or ^{123}I .

5. A compound according to claim 3 wherein X is ^{18}F .

8. A compound according to claim 1

x is 0 or 1
y is 2
z is 4
q is 1
m and j are each 0, and
X is ^{18}F , or ^{123}I .

9. A compound according to claim 8 wherein

x is 1
X is ^{18}F .

10. The compound of claim 8 wherein x is 0 and X is ^{123}I .

11. A compound according to claim 8 wherein x is 1 and X is ^{123}I .

12. A compound according to claim 1

wherein R_1 and $R_2 = R_3$

x is 0
y is 1
z is 2
q is 0
m is 1
n is 1
j is 0, and
X is ^{18}F , or ^{123}I .

1 13. A compound according to claim 1

2 wherein R_1 and $R_2 = R_3$
3 x is 1
4 y is 1
5 z is 1
6 q is 0
7 m and j are 0, and
X is ^{18}F , or ^{123}I .

14. A compound according to claim 13 wherein X is ^{123}I .

1 15. A compound according to claim 1

2 wherein R_1 and $R_2 = R_3$
3 x is 0
4 y is 1
5 z is 2
6 q is 1
7 m is 1
8 n is 1
9 j is 1, and
X is ^{18}F , or ^{123}I .

16. The compound of claim 15 wherein X is ^{123}I .

1 17. A compound according to claim 1

2 wherein R_1 and $R_2 = R_3$
3 x is 0
4 y is 1
5 z is 2
6 q is 0
7 m is 0
8 j is 1, and
X is ^{18}F , or ^{123}I .

18. The compound of claim 17 wherein X is ^{123}I .

1 21. A compound according to claim 1

2 wherein R_1 and $R_2 = R_3$
3 x is 0 or 1
4 y is 2
5 z is 4

6 q is 1
7 m is 1
8 n is 1
9 j is 1, and
X is ^{18}F , or ^{123}I .

22. The compound of claim 21 wherein X is ^{18}F .

23. The compound of claim 21 wherein X is ^{123}I .

1 24. A compound according to claim 1

2 wherein R_1 and $R_2 = R_3$
3 x is 0 or 1
4 y is 2
5 z is 4
6 q is 0
7 m is 0
8 j is 1, and
X is ^{18}F , or ^{123}I .

25. The compound of claim 24 wherein X is ^{18}F .

26. The compound of claim 24 wherein X is ^{123}I .

1 28. A compound according to claim 12 wherein X is ^{18}F .

2 29. A compound of claim 1 wherein R_1 and $R_2 \neq R_3$.

3 30. A compound according to claim 29 wherein X is ^{18}F .

4 31. A compound according to claim 1 wherein R_1 is X-CH=Ch- , R_2 is H, y is 1 and z is 2.

5 32. A compound of claim 31 wherein X is ^{123}I .